## REMARKS

Claims 1-16 are pending in this application. Claims 2-4, 6, 8, 11-12, 14 and 16 are canceled herein without prejudice or disclaimer, and claims 1 and 5 are amended. Upon entry of this amendment, claims 1, 5, 7, 9-10, 13 and 15 will be pending. Entry of this amendment and reconsideration of the rejections are respectfully requested.

No new matter has been introduced by this Amendment. Support for the amendments to the claims is discussed below.

**Claims 5-9 and 10-16 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** (Office action page 2)

The rejection of pending claims 5, 7, 9, 10, 13 and 15 is overcome by the amendment to claim 5. The dependency from claim 3 has been deleted and claim 5 has been amended to depend from claim 1. Support for the amendment to claim 5 may be found in original claims 1-4 and 6.

**Claims 1-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,319,613.** (Office action page 3)

Claims 1-6, 13 and 14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 7,238,418. (Office action page 3)

Claims 1-6, 13 and 14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5-12 of U.S. Patent No. 7,244,376. (Office action page 4)

Claims 1-4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/524,635 (US 2006/0116461 A). (Office action page 4)

Claims 1-4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2 and 5 of copending Application No. 10/531,075 (US 2006/0008639 A). (Office action page 4)

Claims 1-4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of copending Application No. 10/480,940 (US 2004/0131845 A). (Office action page 5)

Claims 1-8 and 13-16 are rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Takeda et al. (US 6,319,613). (Office action page 6)

Claims 1-16 are rejected under 35 U.S.C. §103(a) as obvious over Takeda et al. (US 6,319,613). (Office action page 6)

Claims 1-4 are rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Kauer (US 3,288,625). (Office action page 7)

Claims 1-16 are rejected under 35 U.S.C. §102(e) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Aruga et al. (US 7,049,358). (Office action page 7)

Reconsideration of the rejections of pending claims 1, 5, 7, 9-10, 13 and 15 is respectfully requested in view of the amendments to the claims.

<u>Explanation of the amendments and support for the amendments</u>

Specifically, claim 1 has been amended to recite "A <u>method of determining the suitability of</u> <u>a</u> solar radiation shielding member comprising solar radiation shielding fine particles ...."

The specification states on page 4, lines 14-21, that:

> "The present invention has been made taking note of such problems, and what it concerns is to provide **a new suitability standard** required in solar radiation shielding members of this type, and also to provide a solar radiation shielding member that satisfies this standard, and a fluid dispersion used for forming such a solar radiation shielding member (a solar radiation shielding member forming fluid dispersion)."

Accordingly, one object of the present invention is to provide a new suitability standard required in solar radiation shielding members. Claim 5 recites "<u>serving as a standard in the method of</u> <u>determining the suitability of a solar radiation shielding member according to claim 1</u>."

Claim 1 has been amended to incorporate the mathematical expression (2) from claim 2. The

mathematical expressions (1) and (2) indicate standards for determining whether or not a solar

radiation shielding member has good solar radiation shielding performance. This can be understood

with reference to page 11, line 11, to page 12, line 1, of the specification:

> "The ratio (P/B) of maximum value to minimum value of the transmittance in the
> solar radiation shielding member having solar radiation shielding performance
> showing the passing standard as having been conformed by the above experiment lies
> on the straight line represented by the equality sign part in the mathematical
> expression (1) or (2). Hence, what is shown is that the solar radiation shielding
> member has sufficient solar radiation shielding performance when the ratio (P/B) of
> maximum value to minimum value of the transmittance in the solar radiation
> shielding member is equal to, or larger than, the value represented by the equality
> sign part in the mathematical expression (1) or (2). That is, in order for the solar
> radiation shielding member to have good solar radiation shielding performance, it is
> necessary to satisfy the mathematical expression (1) or (2)."

The specification states on page 8, line 8, to page 9, line 11 that:

> "The above mathematical expressions (1) and (2) are obtainable in the following
> way: Using a solar radiation shielding member forming fluid dispersion serving as
> a standard (the fluid dispersion being chiefly composed of fine boride particles, a
> resin binder or an inorganic binder, and an organic solvent), a solar radiation
> shielding member the solar radiation shielding performance of which shows a passing
> standard is made up which is constituted of, e.g., a transparent glass plate of 3 mm
> thick or a transparent PET film of 50 mm thick and a coating film of 10 mm or less
> in layer thickness, formed using the solar radiation shielding member forming fluid
> dispersion. From a transmission profile of this solar radiation shielding member,
> measured with a spectrophotometer, the maximum value P of transmittance and the
> minimum value B of transmittance are found to determine the ratio of (maximum
> value P/minimum value B), and this value (P/B) is plotted with respect to the visible
> light transmittance (VLT). In the same way as the above, a plurality of solar
> radiation shielding members the coating films of which have been made different in
> layer thickness (i.e., the VLT differs with change in layer thickness) and the solar
> radiation shielding performance of which shows the passing standard are repeatedly
> produced, and their transmission profiles are measured. What have been plotted

therefrom are straight-line approximated to draw straight lines, from which the mathematical expressions (1) and (2) are obtained."

That is, the mathematical expressions (1) and (2) as suitability standards are obtained in the following way:

Using a solar radiation shielding member forming fluid dispersion serving as a standard,

Making up a solar radiation shielding member constituted of a transparent substrate and a coating film of 10 mm or less in layer thickness that has been formed using the solar radiation shielding member forming fluid dispersion, the solar radiation shielding performance of the solar radiation shielding member showing a passing standard,

Finding the maximum value P of transmittance and the minimum value B of transmittance from a transmittance profile of the solar radiation shielding member measured with a spectrophotometer, and determining the ratio of [maximum value P/minimum value B],

Plotting this value (P/B) with respect to the visible light transmittance (VLT),

In the same way as the above, repeatedly producing a plurality of solar radiation shielding members the coating films of which have been made different in layer thickness and the solar radiation shielding performance of which shows the passing standard, and then measuring their transmission profiles, and

Drawing straight lines to straight-line approximate the plots of these profiles.

More specifically, the solar radiation shielding member forming fluid dispersion serving as a standard is a dispersion chiefly composed of:

(a) fine boride particles: $LaB_6$ wherein L* is 33.8959, a* is 2.5195, b* is -6.9554 and lattice constant is 4.1560 Å and average primary-particle diameter is 250 nm,

(b) binder: ultraviolet-curable resin,

(c) organic solvent: isopropyl alcohol, cyclopentanone or toluene, and

(d) polymer type dispersant.

As the above transparent substrate, a PET film of 50 mm thick is used.

In addition, a plurality of solar radiation shielding members constituted of a transparent substrate and a coating film of 10 mm thick or less in layer thickness formed using a solar radiation shielding member forming fluid dispersion, the solar radiation shielding performance of the solar radiation shielding members showing a passing standard (i.e., acceptable products), are ones corresponding to

solar radiation shielding member having a solar shielding transmittance of 60% or less at $60\% \leq VLT \leq 80\%$, and

solar radiation shielding member having a solar shielding transmittance of 35% or less at $38\% \leq VLT \leq 55\%$.

That is, a plurality of acceptable products (solar radiation shielding members) made different in layer thickness and having a solar radiation transmittance of 60% or less at $60\% \leq VLT \leq 80\%$ are repeatedly produced, and their respective transmission profiles are measured. In the same way as the above, a plurality of acceptable products (solar radiation shielding members) made different in layer thickness and having a solar radiation transmittance of 35% or less at $38\% \leq VLT \leq 55\%$

are repeatedly produced, and their respective transmission profiles are measured, followed by drawing straight lines to straight-line approximate these plots. The mathematical expressions (1) and (2) are thus obtained.

### Regarding the rejections

Applicant submits that the claims as amended are distinguished from all of the cited art.

In particular, regarding Takeda et al. (U.S. Patent No. 6,319,613), cited in an obviousness-type double patenting rejection, and rejections under 35 U.S.C. 102(b) and 103(a), Applicant submits that Takeda '613 does not does not disclose such a new suitability standard. Specifically, Takeda '613 is silent as to "a method of determining the suitability of a solar radiation shielding member" which sets forth the above mathematical expressions (1) and (2) as suitability standards. The other cited references also do not disclose or suggest the method of amended claim 1.

Claims 1, 5, 7, 9-10, 13 and 15 are therefore patentable over the cited references.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

U.S. Patent Application Serial No. **10/533,586**
Amendment filed November 21, 2008
Reply to OA dated June 27, 2008

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosure: Petition for Extension of Time

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